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ARTICLE XX.

Description of a New Species of Helix, from California, and a new Characteristic Form of certain American Colimaceæ. By Isaac Lea. Read March 5th, 1852.

HELIX LECONTHII. Pl. XXX. Fig. 13.

Testâ plano-convexâ, infernè convexâ, papillosâ, bruneo-cornèâ, latè umbilicatâ, tridentatâ, intus columnâ accessione instructâ; anfractibus senis; aperturâ subrotundatâ, constrictâ; labro hepatico, reflexo, bidentato; columellâ uno-dentatâ.

Shell plano-convex, convex below, papillose, brownish horn-colour, widely umbilicated, three toothed, furnished with an accessory column within; whorls six; aperture rounded, constricted; outer lip dull-brown, reflexed, two-toothed; columella one-toothed.

Hab. St. Francisco, J. L. Le Conte, M. D.

My cabinet and cabinet of Dr. Le Conte.

Diam. .27,

Length .15, of an inch.

Remarks.—This is a very beautiful little species, which is allied in some of its characters to *hirsuta*, Say, *inflecta*, Say, and *Leai*, Ward. It is about the size, outline and colour of the last, and the umbilicus is of the same size. It differs, however, in the teeth, the *Leai* having none on the outer lip; and in the papillæ, which are smaller, rounder and closer in the *Leai*. The tooth on the columella is alike in both, being long, white, and incurved. Like the *inflecta*, it has two teeth on the outer lip, but these are much larger and whiter in the *inflecta*, which differs also in having the umbilicus closed, and in the papillæ being less distinct. In colour it is like a brown *hirsuta*, but it differs in being smaller, in being umbilicate, and in having two teeth on the outer lip, instead of a sinus, as in *hirsuta*, which has a much larger tooth on the columella, and a much more constricted aperture.

Fig. 13, b represents the papillæ enlarged.

Neither of the few specimens brought by Dr. Le Conte has the animal alive, which, of course, will remain yet to be described. The papillæ cover the whole surface. On the upper portion of the whorls they are close and elongate, passing into the form of striæ. On the lower portion they are more rounded and beautifully displayed. It is very probable that in some very perfect specimens, they may be found to have a hirsute character.

I dedicate this species to Dr. Le Conte, whose enterprising researches in California have brought to our knowledge many new forms in other branches of natural history.

Accessory Column in the Family Colimacea.

When recently examining very closely the structure of some of our *Helices*, I observed what had before escaped my attention, a pillar or an additional column, placed like a fulcrum (buttress) in the interior, against the wall of the ordinary column, at the distance of a fifth to a third of a revolution of the whorl from the aperture. I first observed it on the *Carocolla spinosa*, (Nobis,) and followed up this discovery until I detected it in a number of species and three different genera, admitting *Carocolla*, of Lamarck, and *Polygyra*, of Say, to be distinct genera, which I think it better at present to recognise.

This fulcrum, as I propose to call it, in distinction from the central column, varies in form, in size and in place in different species; and at a future period I may give a more exact account and a fuller description than I am enabled at present to take the time to do. It is generally visible from the exterior by the naked eye, when the specimen is thin and in a perfect state. With the assistance of a lens it may be easily seen, though not perfectly examined and defined. For this purpose it is necessary to fracture the portion of the shell in the vicinity of the *fulcrum*. It will be found in some species to be a simple round column soldered to the paries of the main column; in others, a compressed or flattened column, extending into the cavity of the whorl.

The purpose of this *fulcrum* or buttress is very evidently instituted for the greater strength of the ultimate whorl, which being very much enlarged, seems, in some of these more delicate species to require additional support.

I have detected the fulcrum in the following species, and as several of the species of Dr. Binney and Dr. Gould are unknown to me, I think it likely to be found in some of them.

Carocolla spinosa, Lea.
 “ *Edgariana*, Lea.
Helix hirsuta, Say.
 “ *monodon*, Racket.
 “ *Leai*, Ward.

Helix leporina, Gould.
 “ *Lecontii*, Lea.
Polygyra Troostiana, Lea.
 “ *Dorfeuilliana*, Lea.

It is due to my friend Dr. Leidy to say, that, when I informed him, some months since, of my having observed this *fulcrum* in many of the *Helices*, that he at once informed me that while engaged on the anatomical portion of Dr. Binney's work, which he accomplished for that zoologist, he had observed in the *Helix hirsuta* this character of the shell, and advised Dr. Binney of it at the time. But it seems that he did not take advantage of Dr. Leidy's information, or he may not have himself detected, on examination, this important additional character to these species.

While I have the *Polygyra Troostiana* and *P. Dorfeuilliana* before me, I will take the opportunity to express my dissent to these species being placed by Dr. Binney and Dr. Gould, as synonymous with *Helix fatigiata*, Say. They are not only entirely distinct from *fatigiata*, but are distinct in themselves, and I am sure that zoologists who may

procure good specimens of both, will, on a critical examination, declare them to be different from each other and distinct from *fatigiata*.

In the very learned and elaborate work of the late Dr. Binney, "Terrestrial Air-Breathing Mollusks of the United States," he takes occasion to state his strong disapprobation of the use of personal names for species in natural history, and at the same time points out a case where he considered it had been carried, to an abuse by a naturalist of this city. I wish simply, in answer, to give an opinion on the subject, first premising, that Dr. Binney had himself, in at least two instances, applied personal names to his own species, few of which he made, committing a graver error than those who do not disapprove of the use of personal names.

There are several reasons, in my opinion, why they may be used:

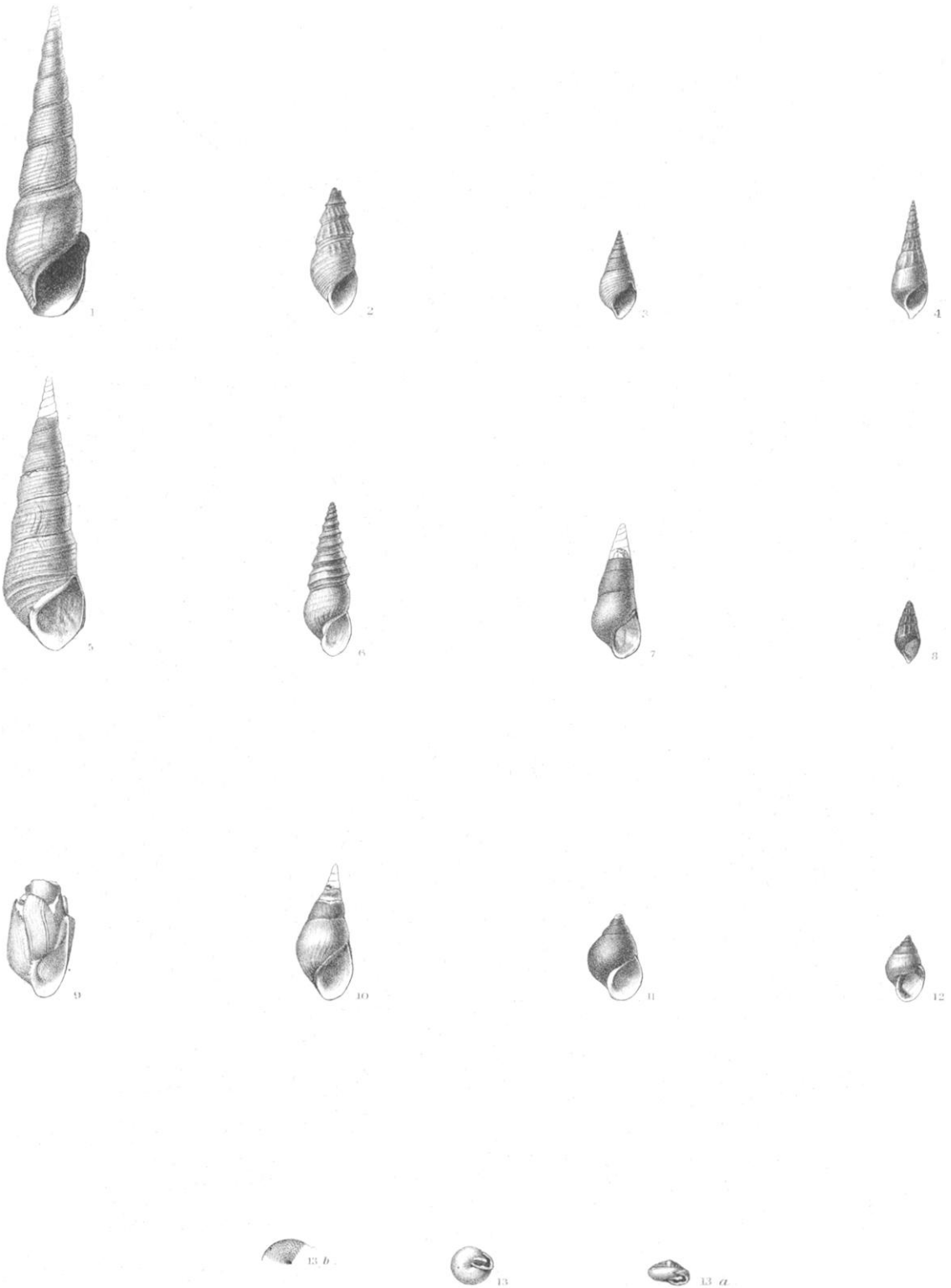
1st. Most of the great naturalists, for nearly one hundred years, have used them without hesitation; and the most distinguished of modern writers have sanctioned the example by following it; as Lamarck, in *Helix Bonplandii*, &c.; Ferussac, in *Helix Richardii*, &c., as well also other eminent writers in various branches of natural history.

2d. It is a good substitute, where a well recognised descriptive name cannot be applied, which is often the case.

3d. It is an honourable acknowledgment of services performed by co-labourers in the field of science, and it is a gratification due to ardent collectors, who labour for the man of science at a distance, and often in parts of the world subject to disease and other dangers.

Some very distinguished naturalists have gone much beyond the simple use of proper names for species, for they have applied them even to genera. For instance, Lesueur's genus *Macluria*; Tremenville's genus *Rissoa*; D'Orbigny's genus *Acostæa*, &c. &c.

In botany, personal names thus applied to *genera* have been most extensively used. In zoology I do not consider this necessary or desirable, but I do think there is not only a convenience in using such names for species, but sometimes almost an imperative necessity for it. In very extensive genera, where many hundred species abound, as in the genera *Unio*, *Melania*, *Conus*, &c., &c., it would be impossible to obtain descriptive names for all.



1 *Basistoma Edwardsii*
 2 *Melania perstrata*
 3 " *sculptilis*
 4 " *Clarkii*.....

5 *Melania Brumbyi*.....
 6 " *oblata*.....
 7 " *furva*.....
 8 " *Sellersiana*
 9 " *oppugnata*

10 *Melania Saffordii*
 11 " *pinguis*..
 12 " *gibbosa*..
 13 *Helix Lecontei*...